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| APPLICATION NO.           | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|---------------------------|----------------|----------------------|--------------------------|------------------|
| 10/749,709                | 12/31/2003     | Michael Todd         | 36400.72US1              | 8816             |
| 25541 7:                  | 590 07/28/2005 |                      | EXAMINER                 |                  |
| NEAL, GERBER, & EISENBERG |                |                      | EDGAR, RICHARD A         |                  |
| SUITE 2200<br>2 NORTH LAS | SALLE STREET   |                      | ART UNIT                 | PAPER NUMBER     |
| CHICAGO, IL               | 60602          |                      | 3745                     |                  |
|                           |                |                      | DATE MAIL ED: 07/28/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  |  | ্ব  | NEW |  |  |  |
|---|--|--|---|-----|--|--|--|
|   |  | Application No.  | Applicant(s)  |     |  |  |  |
| Office Action Summary                         |  | 10/749,709   | TODD, MICHAEL   |     |  |  |  |
|   |  | Examiner   | Art Unit  |     |  |  |  |
|   |  | Richard Edgar  | 3745  |     |  |  |  |
| Period fo                                     | The MAILING DATE of this communication app<br>or Reply   | ears on the cover sheet with the c   | orrespondence address   |     |  |  |  |
| THE - Exte after - If the - If NC - Failt Any | MAILING DATE OF THIS COMMUNICATION.  Insions of time may be available under the provisions of 37 CFR 1.13 or SIX (6) MONTHS from the mailing date of this communication.  The period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tim<br>y within the statutory minimum of thirty (30) day<br>vill apply and will expire SIX (6) MONTHS from<br>, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication D (35 U.S.C. § 133). | n.  |  |  |  |
| Status  |  |  |   |     |  |  |  |
| 1)🔯   | Responsive to communication(s) filed on 31 De  | ecember 2003 under 37 CFR§1.5  | 53(b).  |     |  |  |  |
|   | This action is FINAL. 2b)⊠ This action is non-final.   |  |   |     |  |  |  |
| 3)  |  |  |   |     |  |  |  |
| ,   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |   |     |  |  |  |
| Disposit                                      | ion of Claims  |  | • • •   |     |  |  |  |
| 4)[🔀  | Claim(s) <u>1-9</u> is/are pending in the application.   |  |   |     |  |  |  |
| •/١८૩   | 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |   |     |  |  |  |
| 5)□   | Claim(s) is/are allowed.   | m nom concideration.   |   |     |  |  |  |
|   | Claim(s)israte allowed.  Claim(s) <u>1,2,6,8 and 9</u> is/are rejected.  |  |   |     |  |  |  |
|   | Claim(s) 3-5 and 7 is/are objected to.   |  |   |     |  |  |  |
|   | Claim(s) are subject to restriction and/or   | r election requirement.  |   | (   |  |  |  |
| Applicat                                      | ion Papers   |  |   |     |  |  |  |
|   | •  | r  | ·   | . ( |  |  |  |
| ·   | 9)⊠ The specification is objected to by the Examiner.  10)⊠ The drawing(s) filed on <u>31 December 2003</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.   |  |   |     |  |  |  |
| 10)23   | Applicant may not request that any objection to the  |  | •   |     |  |  |  |
|   | Replacement drawing sheet(s) including the correcti  | -  | , ,   | ٠,  |  |  |  |
| 11)   | The oath or declaration is objected to by the Ex   |  | •   | 1). |  |  |  |
| 11/   | The dath of declaration is objected to by the Ex   | animer. Note the attached Office   | Action of form PTO-152.   |     |  |  |  |
| Priority (                                    | under 35 U.S.C. § 119  |  |   |     |  |  |  |
|   | Acknowledgment is made of a claim for foreign All b) Some * c) None of:  |  | -(d) or (f).  |     |  |  |  |
|   | 1. Certified copies of the priority documents  |  |   |     |  |  |  |
|   | 2. Certified copies of the priority documents  |  |   |     |  |  |  |
|   | <ol> <li>Copies of the certified copies of the prior<br/>application from the International Bureau</li> </ol>  |  | ed in this National Stage   |     |  |  |  |
| * 8   | See the attached detailed Office action for a list of  | of the certified copies not receive  | d.  |     |  |  |  |
|   |  |  |   |     |  |  |  |
|   |  |  |   |     |  |  |  |
| Attachmen                                     | • •  |  |   |     |  |  |  |
| 1) Notic                                      | e of References Cited (PTO-892)  | 4) Interview Summary   |   |     |  |  |  |
| 2) U Notic<br>3) Notic                        | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   | Paper No(s)/Mail Da 5) Notice of Informal P  | ate atent Application (PTO-152)   |     |  |  |  |
|   | r No(s)/Mail Date <u>3/26/2004</u> .   | 6) Other:  |   |     |  |  |  |

#### **DETAILED ACTION**

### **Drawings**

The drawings are objected to under 37 CFR 1.83(a). Conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation. Fig. 4 uses non-conventional graphical drawing symbols for representing the voltage source 58, controller 50 and fan 42. If applicant does not wish to use conventional graphical drawing symbols well-known in the art, the examiner suggest representing the features with a written label exemplifying the elements. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Specification

The disclosure is objected to because of the following informalities:

On page 2, line 16, "16" should be --18--.

On page 3, line 8, "16" should be --118--.

Appropriate correction is required.

### Claim Objections

Claims 2, 3, 6, 7, 8 and 9 are objected to because of the following informalities:

In claim 2, line 2, --housing-- should be inserted after "pump".

In claim 3, line 1, --housing-- should be inserted after "pump".

In claim 6, line 2, --housing-- should be inserted after "pump".

Claim 7 should be amended as follows:

The assembly as set forth in claim 6, wherein the assembly fan is secured to the hydraulic pump housing by fasteners threaded into the pump housing.

In claim 8, line 2, --housing-- should be inserted after "pump".

In claim 8, line 3, --housing-- should be inserted after "pump".

In claim 9, line 2, "the hydraulic pump" should be -- a hydraulic pump housing--.

In claim 9, line 4, --housing-- should be inserted after "pump".

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In claim 9, line 5, "hydraulic fan" should be --hydraulic pump housing--.

The claim suggestions above seek to better define the invention since claim 1 describes the pump being mounted *in* the housing. Following the description in the specification, the fan and controller are mounted to the pump by way of the pump housing.

Claim 9 does not invoke 35 USC § 112, sixth paragraph. The inclusion of an electric fan, a shroud and a controller after the phrase "means for" is sufficient structure for achieving the cooling function (See MPEP §2181). The examiner suggests changing "means" to --method-- in line 1.

Appropriate correction is required.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Laid-open JP 11-278065 (Japanese reference, hereinafter) in view of United States Patent No. 3,853,193 (Dunn hereinafter).

The Japanese reference teaches a hydraulic pump 5 cooled by an electric fan 49 (see paragraph 0040). A controller 16 senses the temperature of the hydraulic pump 5 housing and controls the speed of the fan 49 accordingly (see paragraph 0041).

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The Japanese reference shows the operation of the assembly, but does not teach how the assembly elements are mounted relative to one another.

Dunn teaches unnumbered fans mounted on hydrostatic transmissions 27, 28 of a tractor (see Fig. 2) for the purpose of cooling the transmissions 27, 28 (see col. 3, lines 38-46). The fans are shown spaced from the transmissions 27, 28, and may be considered located to the side or on top, depending on which direction is used as a reference.

Since the Japanese reference shows electric fans used to control the temperature of hydraulic pumps, and Dunn teach that hydraulic pumps may have fans mounted thereon, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to mount the Japanese fan on the pump housing, as taught by Dunn, for the purpose of cooling the transmission of a tractor.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Laid-open JP 11-278065 (Japanese reference, hereinafter) in view of United States Patent No. 3,853,193 (Dunn hereinafter) as applied to claims 1, 2, 6 and 8 above, and further in view of United States Patent No. 3,937,192 (Longhouse hereinafter).

The Japanese reference in view of Dunn, as explained above, teach a hydraulic pump housing cooled by a fan mounted on the hydraulic pump housing, wherein a controller controls the fan speed based on the temperature of the hydraulic pump

housing. The combination of references, however, does not teach a shroud which envelops the fan.

Longhouse teach a fan 24 having a shroud assembly 18 enveloping the fan for the purpose of diminishing recirculation of the air flow through the fan.

Since the modified Japanese reference shows a fan, and Longhouse teach to envelop a fan with a shroud, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify the Japanese reference so that the fan has an enveloping shroud, as taught by Longhouse, for the purpose of diminishing recirculation of the air flow through the fan.

### Allowable Subject Matter

Claims 3-5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claims 3 and 7 require either a bracket or threaded fasteners for securing the fan to the housing. Dunn only teaches the fans being mounted to the housings by the transmission shafts, and therefore not with a bracket or threaded fasteners. One having ordinary skill in the art would not modify the connection between the fans and the housings of Dunn to be either brackets or threaded fasteners since the modified connection would cause the fans to be immobile in relation to the transmission housings.

#### Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7 am- 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard Edgar

Examiner

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